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IN MEMORIAM: RICHARD (ROUTLEY) SYLVAN
1935-1996

I was among those who wanted to *become* Richard Sylvan (né Routley). Logician, metaphysician, social and environmental philosopher, builder of systems and houses, colleague and adviser, lover of Nature–Richard had many *personae*. But the ambition to *be* Sylvan was (and is) too large. And anyway it must be withdrawn, after his sudden death on 16 June, 1996 of a massive heart attack while visiting the island of Bali, Indonesia, with his second wife Louise.

Sylvan was a great credit to our *ANU* Institute of Advanced Studies. Sadly, he did not always receive optimal support, for reasons that reflect badly both on him and on us. On him, because he was a *difficult* (though not unpleasant) man. In response we his colleagues sometimes had difficulty in suffering him, often on grounds that shame our pretensions to be a great university.

Nonetheless Sylvan's academic record was outstanding. He bore individual or joint responsibility for some 27 books and booklets, together with scores and scores of highly innovative professional articles. In philosophy Richard "covered the waterfront," tackling topics in (among others) logic, epistemology, metaphysics, ethics and environmental philosophy. For his contributions he was elected to the Australian Academy of the Humanities in 1977, but he resigned from that body in 1980.

Richard Routley was born in New Zealand in December, 1935. He received his bachelor's degree from Victoria University of Wellington, going on to graduate study in philosophy at Princeton in 1959-61. He then took a position at Sydney University without having completed his Ph. D. This was awarded many years later, in 1981, for the extended first chapter of his logico-philosophical treatise on "noneism", *Exploring Meinong's Jungle and Beyond*.[1]

I am indebted to Louise Sylvan, Val Plumwood, Len Goddard, Errol Martin, John Passmore, Michael McRobbie, Kit Fine and Jack Smart in the preparation of these remarks. And I am particularly indebted to David Bennett, with whom I prepared a somewhat more general account of Sylvan's career; and to Charles Parsons, who requested the current concentration on Sylvan's contributions to logic. (Naturally, all opinions expressed are my own, whether shared or not.)

[1] Departmental Monograph #3, Philosophy Department, Research School of Social Sciences, Australian National University, Canberra, 1980.

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Part of this book was in fact written by Sylvan's first wife and constant collaborator Val (Plumwood, as she now is). Richard moved on with Val from Sydney to the University of New England in New South Wales, where in company with Len Goddard and others they helped to build a strong logic program and to found the Australasian Association for Logic. In 1968-71 he held a research position at Monash University in Melbourne. From 1971 on Sylvan was a philosopher in the Research School of Social Sciences at the Australian National University.

I began working with Sylvan in 1971. It happened thus. Richard had worked out with Val a semantics for the "first degree" of entailment systems like Anderson and Belnap's E and R. But how, you may ask, did that semantics reject paradoxes like $p \,\&\sim p \rightarrow q$? Easy! The Routley & Routley maneuver (which had algebraic antecedents in the work of Polish, South American and US logicians–e.g., Dunn) was simply to find a "setup" in which $p \,\&\sim p$ was *true* while q was *false*. We understand easily about falsifying q; but how shall we "truthify" $p \,\&\sim p$? Easy again–we truthify p, and then we truthify $\sim p$. Oops. Isn't this a *fallacy of equivocation*? Answer–*no*, not for Routley & Routley. For they postulate for each setup w a *companion* setup $w*$; and their truth-condition on $\sim$ is that $\sim p$ shall be true at $w \Leftrightarrow p$ is false at $w*$. And thus with the aid of the Routley $*$ (and of what Kit Fine later came to call a "point shift"), the Routleys offered a 2-valued semantics that *did in* such noisome paradoxes as $p \,\&\sim p \rightarrow q$.

But how were the Routleys also to do in paradoxes of higher degree, like the "mingle" theorem $p \rightarrow (p \rightarrow p)$? A draft on the semantics of entailment that Richard then circulated contained ideas that it was possible to shape and mould into the *relational* semantics for relevant logics.

How did the relational semantics work? It worked as a *generalization* of the well-known *Kripke* semantics for modal and related logics. And the key here was that, just as *unary* modal operators like *box* and *diamond* are neatly explicated in terms of a *binary* accessibility relation on worlds, so a *binary* connective like $\rightarrow$ is reasonably paired with a *ternary* accessibility relation. After that, it's just a matter of finding appropriate semantical postulates and coming up with a completeness proof. (Or, more accurately, with *many* completeness proofs, since relevant logics share with modal logics the property that one gets *different* ones, depending on properties of relations.)[2]

Alasdair Urquhart also proposed a semantics for relevant logics, at about the same time (or even a little before). And in fact the eventual proposal of Routley's draft was not far from Urquhart's "semilattice semantics". It was Routley who had the general idea of the ternary relation and the appropriate *truth-condition* that it imposes on $A \rightarrow B$ at a "world" w. So the *giant step*

[2]For details and citation of relevant articles see Richard Routley, Val Plumwood, Robert K. Meyer, and Ross T. Brady, *Relevant Logics and their Rivals*. Atascadero: Ridgeview, 1982.

was in fact his. It was taken again, about a year later but independently, by Fine.

Besides free logic and his work on Meinong, Sylvan was an important contributor to the development of *paraconsistent* ideas, already in the first-degree semantical work with Val Plumwood cited above. This work led him into important collaborations with other logicians, as did his work on relevant logics and on a number of other subjects. Besides those mentioned elsewhere in this note, among Sylvan's important logical collaborators were Nicholas Griffin, Graham Priest, Ayda Arruda, Dominic Hyde and Jean Norman.

Richard continually applied (and was continually turned down) for promotion to full Professor at *ANU*. It is probably not irrelevant that, in all his enterprises, he almost never chose the easy or popular course. His enthusiasms–logical, intellectual and political–were for the alternative. To get the counter-suggestible Sylvan to defend some view, a good move was to remark that the view was now utterly discredited.

So Richard Sylvan is gone. It's hard to believe; it would be in character for him to be fooling us, spreading the rumour of his death for some deep Sylvanesque purpose. I personally miss him very, very much. When my own career was in ashes, it was Sylvan's invitation to come Down Under in 1974 that brought it back to life. And now logic and philosophy have suffered a great, great loss. Greater than they know.

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